

REMARKS/ARGUMENTS

Claims 4-5 and 12 are cancelled.

Support for the amendment of Claim 1 is found at the originally filed specification and throughout the originally filed claims. Additionally, support for the amendment of Claim 1 is found, for example, at originally filed Claims 4 and 5, the subject matter thereof now incorporated into present Claim 1.

Support for the specification amendments is found at the originally filed specification.

No new matter has been added.

The specification has been amended to capitalize the trademark DESMODUR® and to ensure that the trademark is accompanied by generic terminology.

The anticipation rejection of Claims 1-3, 11, and 14, as being unpatentable in view of Lindemann is respectfully traversed because Lindemann does not describe or suggest all of the features of the present claims.

Lindemann describes a method for preparing an interpenetrating polymer network. Applicants submit that drawbacks applicable to the method of Lindemann are described at page 1, lines 27-33 of the originally filed specification, that states “Attempts have been made to mix the polymers at the molecular level and thus to obtain what may be called interpenetrating networks, by swelling a crosslinked polyalkylene polymer with styrene and then polymerizing the styrene in situ.” “However, the degree of swelling achievable is limited, and the contents of polystyrene which can be introduced into the network in this way are not substantially higher than 10%. In addition, the resultant modification of properties is unstable and disappears on exposure to thermal stress because of phenomena associated with demixing” (underlining emphasis added).

Thus, Lindemann has, as drawbacks, a limited degree of swelling, a limit on the contents of the polystyrene that can be introduced into the network, and unstable modification properties.

With regard to crosslinking, both the active crosslinking agent and the latent crosslinking agent of Lindemann are monomers that are copolymerized with the monomers constituting the first polymer emulsion and the second monomer emulsion, respectively (see Lindemann, column 5, lines 58 to 65, and column 6, lines 25-35).

Thus, the crosslinking agent(s) of Lindemann are distributed in the resulting polymer in a random fashion. Thus, the Lindemann's resultant network is a random network with a broad distribution of network chain lengths (e.g., polymer chains connecting the crosslinking sites). In such a random network, a substantial amount of short network chains occurs that deteriorate the elastic properties of Lindemann's network.

In contrast, in present Claim 1, for example, crosslinking of the isobutene polymer is via functional groups which are arranged exclusively at the ends of the isobutene polymer molecules, as shown by the present Claim 1 feature "wherein the functional groups of the isobutene polymer have been arranged exclusively at the ends of the isobutene polymer molecule." These end group crosslinked polyisobutenes have a narrow distribution of the length of network chains for the composition of present Claim 1.

As described above, Lindemann's resultant network has a broad distribution of network chain lengths. Accordingly, the product of Lindemann is different than the product of present Claim 1 and the claims depending therefrom that possess a narrow distribution of network chain lengths. Lindemann cannot therefore anticipate present Claim 1, and the claims depending therefrom, because Lindemann does not describe or suggest every feature

of present Claim 1, and the claims depending therefrom. Withdrawal of the anticipation rejection is respectfully requested.

The obviousness rejection of Claims 1-11 and 13-14 as being unpatentable in view of the combination of Lindemann and Iwahara is respectfully traversed because Applicants submit the references are not combinable. Lindemann deals with aqueous emulsions (see, for example, the Abstract of Lindemann). Iwahara discloses water sensitive crosslinking groups (see, for example, Iwahara, at column 17, line 18). Because Lindemann describes aqueous emulsions, and Iwahara describes water sensitive crosslinking groups, Applicants submit the two references are not combinable.

Withdrawal of the obviousness rejection is respectfully requested.

Applicants submit the present application is now in condition for allowance. Early notification to this effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Charles J. Andres, Jr., Ph.D.
Attorney of Record
Registration No. 57,537

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)